

TITLE OF THE INVENTION
SYNTHETIC HIV GAG GENES

ABSTRACT OF THE DISCLOSURE

- 5 Synthetic DNA molecules encoding HIV *gag* and
modifications of HIV *gag* are provided. The codons of the synthetic
molecules are codons preferred by the projected host cell. The synthetic
molecules may be used as a polynucleotide vaccine which provides
effective immunoprophylaxis against HIV infection through stimulation
10 of neutralizing antibody and cell-mediated immunity.